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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/501,977

02/11/2000

Yoshitaka Takahashi

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10/23/2002

ANTONELLI TERRY STOUT AND KRAUS
SUITE 1800
1300 NORTH SEVENTEENTH STREET
ARLINGTON, VA 22209

EXAMINER

WHITMORE, STACY

ART UNIT

PAPER NUMBER

2812

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/501,977

Applicant(s)

TAKAHASHI ET AL.

Examiner

Stacy A Whitmore

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-21 is/are pending in the application.
- 4a) Of the above claim(s) 14, 15, 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 16-17 and 18-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 14-15, and 20-21 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

FINAL ACTION

1. Newly submitted claims 14-15, and 20-21 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 14 and 20 add second input and/or input/output units and/or a second storage unit which were not present in the originally examined claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 14-15, and 20-21 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 16 recites the limitation "specification information" in lines 11 and 13. There is insufficient antecedent basis for this limitation in the claim.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Barrientos (5,910,899).

5. As for claim 18-19, Barrientos taught the invention as claimed, including an information processing system used for designing a semiconductor integrated circuit [abstract, lines 1-2], comprising:

a storing unit for storing circuit information of a module constituting the semiconductor integrated circuit, a floorplan which is allocation information of blocks constituting the module, and evaluation indices for evaluating modifications of the floorplan [abstract, fig. 5; col. 3, lines 51-53; and col. 4, lines 54-65; col. 5];

wherein the circuit information, floorplan and evaluation indices are associated with each other [cols. 5 and 8]; and

an input/output unit for transmitting the associated circuit information, floorplan and evaluation indices from the storing unit [the input output unit is inherently included in Barrientos system because Barrientos system utilizes a computer program product that is interactive with a user, and further displays information relating to the interaction, which would require the use of an input output unit in order to perform those functions, see cols. 3, 5, and 8].

[claim 19] Barrientos further taught wherein the evaluation indices includes know-how of a designer who designs a semiconductor integrated circuit [col. 22, lines 33-41].

6. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrientos (5,910,899) in view of Ramachandran (6,002,857).

7. As for claim 16, Barrientos taught the invention as substantially claimed, including an information processing system, comprising:

an input unit for receiving, from external of said information processing system, circuit information of a module constituting a semiconductor integrated circuit, a floorplan which is allocation information of blocks constituting the module, and evaluation indices for evaluating modifications of the floorplan [abstract, fig. 5; col. 3, lines 51-53; and col. 4, lines 54-65; col. 5: the input output unit is inherently included in Barrientos system because Barrientos system utilizes a computer program product that is interactive with a user, and further displays information relating to the interaction, which would require the use of an input output unit in order to perform those functions,

see cols. 3, 5, and 8: see col. 8, lines 36-38, col. 22, lines 53-61 for the external input of circuit information, floorplan, and evaluation indices];

wherein the circuit information, floorplan and evaluation indices are associated with each other [abstract, fig. 5; col. 3, lines 51-53; and col. 4, lines 54-65; col. 5];

a storing unit for storing the associated circuit information, floorplan, and evaluation indices [abstract, fig. 5; col. 3, lines 51-53; and col. 4, lines 54-65; col. 5]; and

a processing unit for reading the floorplan stored in the storing unit according to the specification information when the specification information for modifying the floorplan is input, generating a floorplan candidate being modified based on the read floorplan and the specification information, evaluating the generated floorplan candidate based on the evaluation indices stored in the storing unit, and selecting one floorplan based on an evaluation result [abstract, fig. 5; col. 3, lines 51-53; and col. 4, lines 54-65; col. 5].

Barrientos did not specifically teach generating a plurality of floorplans, and selecting one of the floorplans based on the evaluation result. However, Ramachandran taught the generation of a plurality of floorplans and selection of one of the plurality of floorplans based on evaluation result [abstract]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Barrientos and Ramachandran because adding the generation and selection of one of a plurality of floorplans based on evaluation indices would improve Barrientos' system by improving the speed with which the floorplans can be evaluated [see Ramachandran, abstract] which would improve the overall design time of Barrientos' system of circuit design.

8. Applicant's arguments filed 7/30/02 have been fully considered but they are not persuasive.

On pages 7-8 of the remarks, applicant argues in substance:

A: Barrientos and Ramachandran did not disclose the external input of circuit information, floorplan, and evaluation indices and that the circuit information, floorplan, and evaluation indices are associated with each other.

Examiner respectfully disagrees with applicant for the following reasons:

As to point A: Barrientos disclosed the external input of circuit information, floorplan, and evaluation indices [see col. 8, lines 36-38, col. 22, lines 53-61, furthermore, the circuit information, floorplan, and evaluation indices are associated with each other because all that information is necessary for Barrientos design process].

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

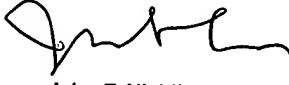
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy A Whitmore whose telephone number is (703) 305-0565. The examiner can normally be reached on Monday-Thursday, alternate Friday 6:30am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (703) 308-3325. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Stacy A Whitmore
Patent Examiner
Art Unit 2812

SW
October 18, 2002



John F. Niebling
Supervisory Patent Examiner
Technology Center 2800